

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU2004/001454

## A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl. <sup>7</sup>: C07J 075/00; A61K 035/22; A61P 05/24; A01K 23/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

STN: (Medline, CA, Biosis, WPIDS): Keyword search using: pregnant, urine, adsorb and extract/isolate/purify

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	US 2004/0072812 A1 (LOMANS et al), 15 April 2004 See whole document	1-4
A	AU 722739 (69304/96) B2 (SOLVAY PHARMACEUTICALS GmbH) 19 March 1998 See whole document	1-4



Further documents are listed in the continuation of Box C



See patent family annex

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent but published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search  
12 November 2004

Date of mailing of the international search report 12 JAN 2005

Name and mailing address of the ISA/AU

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**Supplemental Box**

(To be used when the space in any of Boxes I to VIII is not sufficient)

**Continuation of Box No: III**

The international application does not comply with the requirements of unity of invention because it does not relate to one invention or to a group of inventions so linked as to form a single general inventive concept. In coming to this conclusion the International Searching Authority has found that there are three inventions:

1. Claims 1-4 relate to a method of extracting desired chemical species from pregnant animal's urine, comprising the use of adsorber materials of a specific particle size and the washing of the adsorber material with a buffer solution having a specific pH. It is considered that this extraction method constitutes a first special technical feature.
2. Claims 5, 7-9 and 11 relate to an apparatus for the collection of valuable chemical species from pregnant animal's urine using a general adsorbent material for said chemical species. The apparatus for collection of valuable chemical species using such a general adsorbent material is considered to constitute a second special technical feature. It is considered that this independent claim for an apparatus is not "specifically designed for carrying out" the process of claims 1-4. The contribution over the prior art made by the apparatus does not correspond to that made by the process of claims 1-4. (See the Patent Examiner's Manual, Volume 1, Part 5, paragraphs 10.12 and 10.14)
3. Claims 6 and 10 relate to an apparatus for the collection of valuable chemical species from pregnant animal's urine using an organic water immiscible solvent for said chemical species. The apparatus for collection of valuable chemical species using an organic water immiscible solvent is considered to constitute a third special technical feature. It is also considered that this independent claim for an apparatus is also not "specifically designed for carrying out" the process of claims 1-4.

Since the abovementioned groups of claims do not share the technical features identified, a "technical relationship" between the inventions, as defined in PCT rule 13.2 does not exist. Accordingly the international application does not relate to one invention or to a single inventive concept.

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**Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)**

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

**Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)**

This International Searching Authority found multiple inventions in this international application, as follows :

1. Claims 1-4 A method of extracting desired chemical species from pregnant animal's urine.
2. Claims 5, 7-9 and 11 An apparatus for the collection of chemical species from pregnant animal's urine using a general adsorbent material.
3. Claims 6 and 10 An apparatus for the collection of chemical species from pregnant animal's urine using an organic water immiscible solvent.

See the reasoning on the extra sheet.

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-4

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.

**PCT/AU2004/001454**

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member					
AU	722739	AU	69304/96	CA	2263757	CZ	9900598
		EP	0923381	HK	1021884	HU	9903776
		IL	128670	NO	990952	PL	331884
		SK	24599	WO	1998/008526		
US	2004/0072812						
Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.							
END OF ANNEX							